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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,526	12/30/2003	Tao Li	030163	8867

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QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

EXAMINER

RADOSEVICH, STEVEN D

ART UNIT	PAPER NUMBER
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2138

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/749,526	Applicant(s) LI, TAO	
	Examiner Steven D. Radosevich	Art Unit 2138	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Requirement For Information – 37 USC § 1.105***

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The Assignee (Qual Comm Incorporated) and inventor(s) appear to have been in possession of prior solutions (0004 – present application) prior to the invention.

The Examiner has attempted to locate a copy of the prior solutions which appear relevant to examination in-order to ascertain if the invention is a new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof. The Examiner is requesting a copy of the prior solutions (0004 – present application) the developers had in their possession.

This requirement is made with the intent to assist in the prosecution of this case. The Examiner feels the scope of this requirement is narrow and should be well within the abilities of the concerned parties to provide this information.

The information is required to identify the generation of realistic test data patterns without an external test data pattern generator and without significant increase to the CDMA chip hardware and complexity.

Where applicant does not have or cannot have readily obtained items of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete response to the requirement for that item.

The fee and certification of 37   C.F.R. 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of this requirement under 37   C.F.R. 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communications responding to this requirement and any information disclosures beyond the scope of this requirement under 37   C.F.R. 1.105 are subject to the fee and certification requirement of 37   C.F.R. 1.97.

This requirement is subject to the provisions of 37   C.F.R. 1.134, 1.134, 1.135 and 1.136 and has a shortened statutory period of 2 months. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 C.F.R. 1.136(a).

### ***Conclusion***

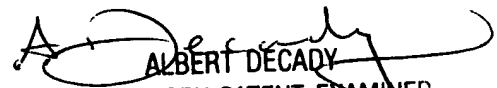
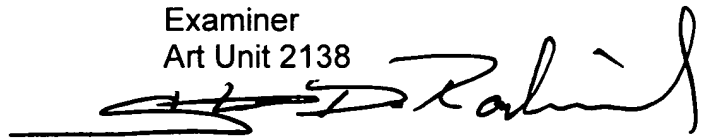
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Radosevich whose telephone number is 571-272-2745. The examiner can normally be reached on 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 571-272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Steven D. Radosevich  
Examiner  
Art Unit 2138



ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

### **DETAILED ACTION**

Claims 1-23 are present for examination.

#### ***Priority***

Acknowledgement is made that no priority either foreign or domestic is claimed for this application and as such the filing date (12/30/2003) is being used for this examination.

#### ***Information Disclosure Statement***

Acknowledgement is made that an Information Disclosure Statement (IDS) was provided with the application received by the office on 9/26/2005.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show the enable signal as described in the specification (0028). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

The drawings are objected to because in figure 2 the components within unit 210 do not have numerical or written label identifications. The units within unit 210 that appear to be multiplexers do not have a selection or control input which is required for selection between the two inputs as to which is the output of the unit if the units are multiplexers.

The drawings are objected to because it appears in figure 3 that respective multiplexers (310) provide both inputs to respective logic AND gates 315 and that respective spreaders (340) provide both inputs to respective logic AND gates 350. It is

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unclear examiner how the multiplexers multiplex a single input or provide multiple outputs from the single input. Examiner notes that a multiplexer combines more than one input into a single output and a demultiplexer expands a single input to produce more than one output.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 7-10, 18-19, and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 7, 18, and 23, it is unclear to the examiner what codes are being combined together to produce the plurality of codes. It is unclear if the plurality of scrambling codes are combined together and the plurality of spreading codes are combined together or if it is a combination of the scrambling codes combined with the spreading codes to produce the plurality of codes.

As per claims 8-10 and 19, these claims are dependent on claims 7 and 18 respectfully and therefore also inherit the 35 U.S.C. 112, second paragraph issues and may not be further considered on their merits.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 13-16, and 20-22 are rejected under 35 U.S.C. 102(a) as being anticipated by Rahul Chauhan (as cited on the 892 with this action under non-patent documents).

1. As per claims 1, 13, and 20, Rahul Chauhan teaches a code division multiple access (CDMA) integrated circuit, comprising:



A demodulator to correlate an input data with a plurality of codes (within page 11 in Rahul Chauhan under “A Walk Through To IS-95A, IS-95B, CDMA-2000 And Call Processing” and Forward Link on pages 9-10); and

A test data pattern generator configured to spread an input test data with at least one of the plurality of codes to form a spread test data, and to provide the spread test data to the demodulator (pages 9-10 in Rahul Chauhan under “A Walk Through To IS-95A, IS-95B, CDMA-2000 And Call Processing”).

2. As per claims 2, 14, and 21, Rahul Chauhan teaches the integrated circuit further comprising a multiplexer configured to multiplex the input data and the spread data to the demodulator (Top figure on page 10 in Rahul Chauhan under “A Walk Through To IS-95A, IS-95B, CDMA-2000 And Call Processing”).

3. As per claims 3, 15, and 22, Rahul Chauhan teaches wherein at least one of the plurality of codes comprises a scrambling code and a spreading code (pages 8-9 in Rahul Chauhan under “A Walk Through To IS-95A, IS-95B, CDMA-2000 And Call Processing”).

4. As per claims 4 and 16, Rahul Chauhan teaches wherein the scrambling code comprises a pseudo-random noise (PN) code and the spreading code comprises a Walsh code. (pages 8-11 in Rahul Chauhan under “A Walk Through To IS-95A, IS-95B, CDMA-2000 And Call Processing”).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5, 6, 12, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rahul Chauhan or Rahul Chauhan as modified as applied to claims 3, 11, and 15, and further in view of Bertin et al. (US Patent 68020033 B1).

5. As per claims 5, 6, 12, and 17, Rahul Chauhan teaches the CDMA integrated circuit as described (as per claims 3, 15, and 11) with a demodulator, test data pattern generator, multiplexer, and a plurality of codes.

Rahul Chauhan does not specifically teach wherein the CDMA integrated circuit further comprises a plurality of AND gates configured to gate off the scrambling code or spreading code.

However in an analogous art Bertin teaches wherein a plurality of AND gates are used to gate off or select specific circuitry and codes within an integrated circuit (columns 7-8 lines 65-9 and figure 6).

Therefore one of ordinary skill in the art at the time the invention was made would have been motivated to incorporate AND gates such as Bertin teaches to gate off

the scrambling code or the spreading code within the CDMA integrated circuit as taught by Rahul Chauhan since the use of AND gates in such a way would allow the selection of desired circuitry and control parameters desired within the circuit as stated by Bertin (columns 7-8 lines 65-1).

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rahul Chauhan as applied to claim 1 above, and further in view of Mailaender et al (2004/0001426 A1).

6. As per claim 11, Rahul Chauhan teaches the CDMA integrated circuit as described (as per claim 1) with a demodulator, test data pattern generator, and plurality of codes.

Rahul Chauhan does not specifically teach wherein the CDMA integrated circuit further comprises a plurality of spreaders configured to spread the input test data with the plurality of codes to form a plurality of spread test data.

However in an analogous art Mailaender teaches wherein a plurality of spreaders are configured to spread the input data with a plurality of codes to form a plurality of spread data (paragraph 0039 and figure 2)

Therefore one of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the plurality of spreaders such as Mailaender teaches configured to spread the input data with a plurality of codes to form a plurality of spread test data within the CDMA integrated circuit as taught by Rahul Chauhan since it would add security to the system such as indicated by Mailaender (paragraph 0039).

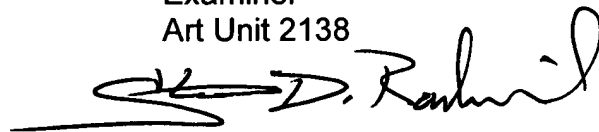
**Conclusion**

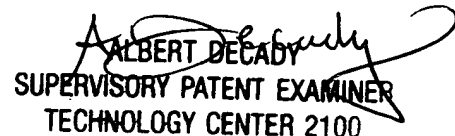
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Examiner  
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